## **ABSTRACT OF THE DISCLOSURE**

One aspect of the invention relates to a method of manufacturing an integrated circuit comprising forming an array of ferroelectric memory cells on a semiconductor substrate, heating the substrate to a temperature near a Curie temperature of the ferroelectric cores, and subjecting the substrate to a temperature program, whereby thermally induced stresses on the ferroelectric cores cause a switched polarization of the cores to increase by at least about 25% as the cores cool to about room temperature. Embodiments of the invention include metal filled vias of expanded cross-section above and below the ferroelectric cores, which increase the thermal stresses on the ferroelectic cores during cooling.

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